



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/757,255

01/14/2004

Dean Joseph Ippolito

4079

7590

03/27/2006

GEOFFREY GELMAN
1134 HBS STUDENT MAIL CENTER
BOSTON,, MA 02163

EXAMINER

KAYES, SEAN PHILLIP

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/757,255

Applicant(s)

IPPOLITO ET AL.

Examiner

Sean Kayes

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on initial filing, 1/14/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/30/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “memory comprising a gear” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

3. Claims 5 and 7 are objected to because of the following informalities:

4. With respect to claim 5, the first display and the third display cannot be the same display. According to claim 3 the first display displays the first amount of time and the third display displays the second amount of time.

5. With respect to claim 7, the first memory and the second memory cannot be the same memory. As set forth in claim 3 the first memory stores the first amount of time and the second memory stores the second amount of time. If the first memory were the same as the second memory, it would necessarily store the same time. Please rewrite this claim to clarify the desired meaning.

Appropriate correction is required.

6. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

7. With respect to claim 6, the first display and the second display are already set forth in claim 3 to be separate displays. Claim 6 fails to further limit the structure as set forth in claim 3. Please rewrite to clarify the desired meaning.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to explain how the microphone should be connected so as to properly provide inputs. The specification fails to explain in what way the microphone should be coupled to the memory. While reference is made in the specification to a “voice recognition program” the specification fails to provide any details as to what program to use or how to input such a program into the device.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2841

11. Claims 1-7, 9-12, and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Klein (US 3698180.)

12. With respect to claim 1 Klein discloses a device for displaying information about a game comprising: a body (chess board, P1, picture I. provided below, 10, figure 2); a first display (P2, picture I. and 30 figure 1) operable to display first information about a player of the game; and a second display (P3 picture I. and 32 figure 1) operable to display second information about the player of the game, the second display facing in a different direction from that of the first display, in which the first display and the second display are attached to the body (displayed are attached by wires.)

Art Unit: 2841

I.

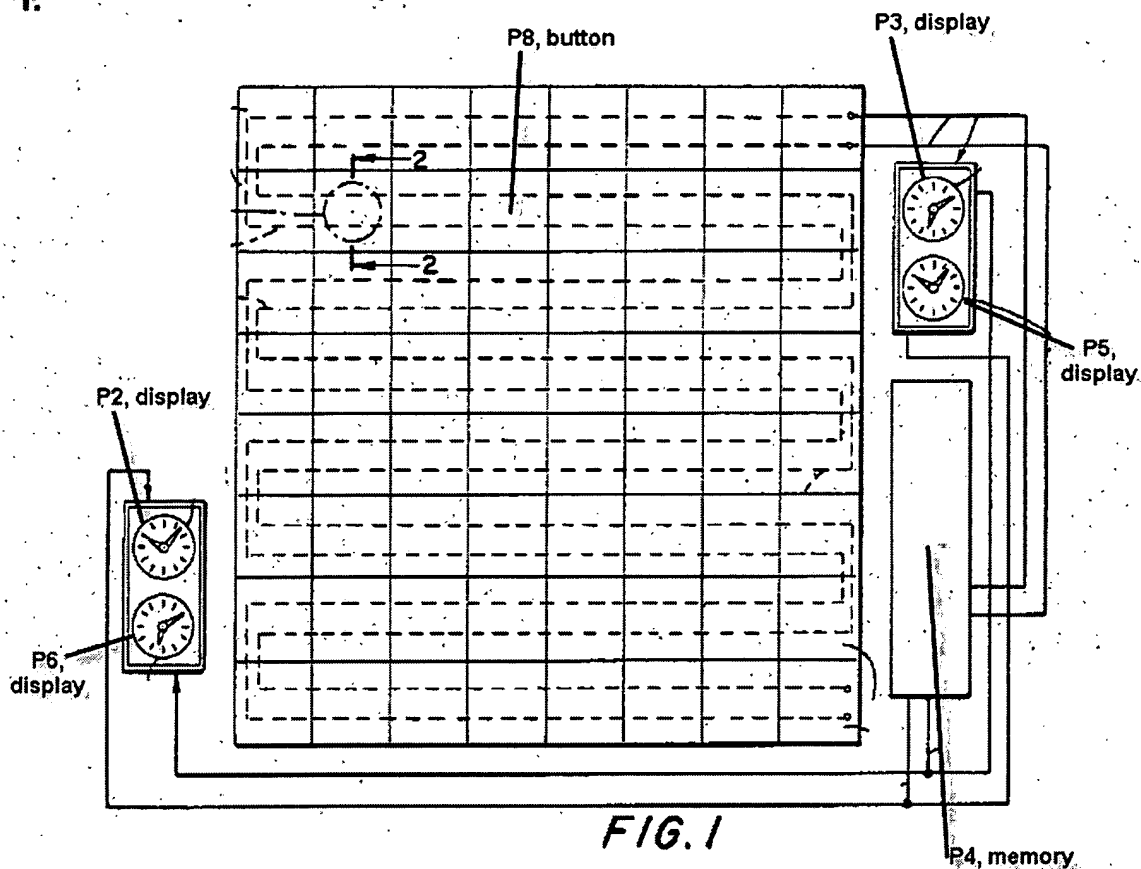


FIG. 1

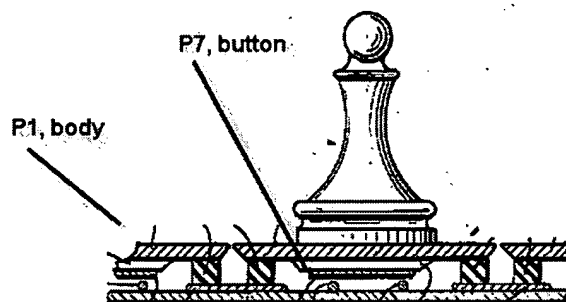


FIG. 2

13. With respect to claim 2 Klein discloses the device of claim 1 in which first information includes a time remaining for the player (the clocks P2 and P3 display the elapsed time for each player. For instance in a timed game of chess if

Art Unit: 2841

each player was given an hour, the remaining time would be the time before the minute hand was in the vertical position after initially moving.)

14. With respect to claim 3 Klein discloses a device for keeping time comprising: a chassis (P1 picture I.); a first memory (P4 picture I.) for storing a first amount of time remaining for a first player of a game, the first memory attached to the chassis (column 2 lines 21-23); a first display (P2 picture I.) for displaying the first amount of time, the first display attached to the chassis (by means of wires) and coupled to the first memory (P4, picture I.); a second display (P5, picture I.) for displaying the first amount of time, the second display attached to the chassis and coupled to the first memory, in which the second display faces in a different direction from that of the first display (depending on the arrangement the displays can face in the same direction or a different direction. The consoles, P2 and P3, while attached to the chassis are not constrained from changing their orientation, face, to be different from that of the chessboard, P1. If the device were placed on a curved table, if the displays were constructed such that they were not level than the displays would face in different directions, or even if a player manually tilted a display so as to better read it the displays P2 and P3 would face in different directions); a second memory (P4) storing a second amount of time remaining for a second player of the game, the second memory attached to the chassis (P1); a third display (P5, picture I.) for displaying the second amount of time, the third display attached to the chassis and coupled to the second memory; and a fourth display (P6 picture I.) for displaying the

Art Unit: 2841

second amount of time, the fourth display attached to the chassis and coupled to the second memory.

15. With respect to claim 4 Klein discloses the device of claim 3, in which the second display faces in a direction opposite that of the first display (depending on the arrangement the displays can face in the same direction or a different direction. The consoles, P2 and P3, while attached to the chassis are not constrained from changing their orientation, face, to be different from that of the chessboard, P1. If the device were placed on a curved table, if the displays were constructed such that they were not level than the displays would face in different directions, or even if a player manually tilted a display so as to better read it the displays P2 and P3 would face in different directions.)

16. With respect to claim 5 Klein discloses the device of claim 3, in which the first display and the third display are the same display. (This claim is unclear, please see objection to claim 5 above. As it is currently put forth the claim language is in contradiction with the independent claim 3 of which it depends. Based on the specification I am interpreting applicant's meaning to be that the first display and the third display are part of a larger display, that each display constitutes a part of a larger single display. Given this interpretation Klein discloses the limitations of claim 5, please see P2 and P6 picture I.)

Art Unit: 2841

17. With respect to claim 6 Klein discloses the device of claim 3, in which the first display is different from the second display. (Claim language fails to further limit over claim 3. Please see objection to claim 6 above.)

18. With respect to claim 7 Klein discloses the device of claim 3, in which the first memory and the second memory are the same memory. (P4 picture I. and 50 figure 1. Please see objection to claim 7 above. The memory P4 has an on and an off state.)

19. With respect to claim 9 Klein discloses the device of claim 3, in which the first memory comprises a gear. (The memory is in the form of the mechanical structure that drives the display for P2. P5 connects to said memory by electrical means, namely wires.)

20. With respect to claim 10 Klein discloses the device of claim 3, in which the first display is at least one of: (a) a liquid crystal display; (b) a dot matrix display; (c) a diode display; (d) a light emitting diode display; (e) an organic light emitting diode display; (f) a cathode ray tube; (e) a projection display; (f) a mechanical display (P1, picture I. and 30 figure 1); and (g) a mechanical clock face (P1, picture I. and 30 figure 1).

21. With respect to claim 11 Klein discloses the device of claim 3 further including: a signal generator for generating a timing signal (timing signal is the

Art Unit: 2841

signal that coordinates the displays P2 to P5 and P3 to P6), the signal generator coupled to the first memory and to the second memory (P4 picture I.); a first button (P7) for signaling a first play in the game, the first button attached to the chassis and coupled to the first memory and to the second memory; and a second button (P8, although any of the wiring means in any of the spaces of the board could function as the second button, so long as it is different from the first) for signaling a second play in the game, the second button (P8) attached to the chassis (P8) and coupled to the first memory and to the second memory (by means of wires, see picture I. or figure 1), in which: the first memory is operative to reduce the first amount of time remaining upon receipt of signals from the second button; the first memory is operative to stop reducing the first amount of time remaining upon receipt of signals from the first button; the second memory is operative to reduce the second amount of time remaining upon the receipt of signals from the first button; and the second memory is operative to stop reducing the second amount of time remaining upon receipt of signals from the second button. (Timing operation is discussed in column 1 lines 41-57. The timing function can be repeated using the two buttons P7 and P8 or any other button located in a space on the board. While it is true that the operation is generally performed by the movement of different pieces, to different positions/buttons, it is not necessary to perform this operation using more than one or two buttons.)

Art Unit: 2841

22. With respect to claim 12 Klein discloses the device of claim 3, further including a processor (the processor is the system made up of the wiring, the board P1, the memory P4, and the timing control means present in each console 30 and 32 figure 1), the processor attached to the chassis and operative to: direct the first memory to reduce the first amount of time remaining; direct the second memory to reduce the second amount of time remaining; direct the first memory to stop reducing the first amount of time remaining; direct the second memory to stop reducing the second amount of time remaining; direct the first display to display the first amount of time; and direct the second display to display the first amount of time (the wiring in the board P1 and the buttons P7, send the signals that switch memory P4 to operate the timing mechanisms in consoles 30 and 32 figure 1.)

23. With respect to claim 14 Klein discloses a device comprising: a means for tracking a first time (clock P2, picture I.); a means for tracking a second time (clock P3, picture I.); a first display means (P2) for displaying the first time in a first direction; a second display (P5) means for displaying the first time in a second direction; and an initiation means (combination of buttons P7, board, and memory P4 picture I.) for initiating the reduction of the first time and halting the reduction of the second time.

24. With respect to claim 15 Klein discloses the device of claim 14 in which the first display means is at least one of: (a) a liquid crystal display; (b) a dot

Art Unit: 2841

matrix display; (c) a diode display; (d) a light emitting diode display; (e) an organic light emitting diode display; (f) a cathode ray tube; (e) a projection display; (f) a mechanical display (P2, picture I.); (g) a mechanical clock (P2, picture I.); (h) a mirror; (i) a reflective surface; (j) a convex mirror; (k) a concave mirror; (l) a series of mirrors; and (m) a transparent panel with opaque indicia.

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (US 3698180) in view of Newbill (US 4541633.)

27. With respect to claim 8 Klein discloses the device of claim 3. Klein does not disclose wherein the first memory is a semiconductor memory.

28. Semiconductor memories are notoriously well known in the art. Similarly the use of computer microprocessors in combination with computer memory and a frequency generator to measure multiple times is very well known. For instance Newbill teaches a chess clock that controls its timing operations with a frequency generator, a microprocessor, and multiple memories.

At the time of the invention it would have been obvious to one skilled in the art to combine Newbill's time controlling means with Klein's sensor board and display layout. The suggestion or motivation for doing so would be to provide a more modern and controlled timing means with the additional control functions of a microprocessor to Klein's invention. For instance it would be easier to reset all the displays and time means using Newbill's timing apparatus. It should be noted that most likely Newbill is using a semiconductor memory for his memory means. Newbill, however, does not explicitly state that the memory is no a semiconductor. At the time of the invention it would have been obvious to one skilled in the art to use a semiconductor memory as the memory means in applying Newbills timing apparatus to Klein's invention. The suggestion or motivation for doing so would be to provide a reliable and easily available and affordable memory for the storage of memory, namely the timing information.

29. With respect to claim 12 Klein in view of Newbill (as modified above) teaches the device of claim 3, further including a processor, the processor attached to the chassis and operative to: direct the first memory to reduce the first amount of time remaining; direct the second memory to reduce the second amount of time remaining; direct the first memory to stop reducing the first amount of time remaining; direct the second memory to stop reducing the second amount of time remaining; direct the first display to display the first amount of time; and direct the second display to display the first amount of time.

Art Unit: 2841

30. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (US 3698180) in view of Rast (US 6904001.)

31. With respect to claim 13 Klein discloses the device of claim 3. Klein does not disclose wherein the device further including a microphone for receiving voice inputs, in which the microphone is electrically coupled to the first memory.

Rast teaches attaching a microphone to a clock/timer for the purpose of recording audible notes.

At the time of the invention it would have been obvious to one skilled in the art to attach a microphone as taught by Rast. Klein's invention is not sufficient to store an audio recording. Subsequently in attaching a microphone as taught by Rast it would be necessary to include a more substantial memory. This memory could either be independent of the first memory or the first memory could be replaced with a more substantial memory capable of both performing the necessary operations of the timer as well as that for the recording of voice information. In the first instance the microphone would be electronically coupled to the first memory by running off the same power source. In the second case the microphone would be coupled to the memory through the processor.

The suggestion or motivation for doing so would be to allow a player or judge/referee to record notes about the game using the game timer.

32. Claim 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (US 3698180) in view of Kifer (US 6102399.)

Art Unit: 2841

33. With respect to claim 16 Klein discloses a device comprising: a body (P1, picture I.); a memory (P4) and four buttons, each of which, when pressed, halts the reduction of a first one of the times remaining stored in a first one of the memory locations, and initiates the reduction of a second one of the times remaining stored in a second one of the memory locations, in which the memory and each of the four buttons are attached to the body (column 1 lines 41-57, the two memory locations correspond to the two conditions of the memory, P4 picture I. The reduction in time is performed in the progression of time such that the hands move toward the limit of time. For instance in the situation where each player has an hour to perform their moves the timer reduces the remaining time by moving the indication of minutes hand close to the vertical position, pointing upward.)

34. Klein does not disclose the memory including four memory locations, in which each of the four memory locations stores a time remaining for a different one of four players.

35. Kifer teaches a four-player version of chess. At the time of the invention it would have been obvious to one skilled in the art to modify Klein's invention to time four different players. This could be done by expanding the number of sensitive spaces on the board to match that of the number of spaces in Kifer's board; the number of clocks per display or console could be increased to four; and two more consoles, or displays, could be provided such that each player would have a display that displayed the time of each player. Additionally the

Art Unit: 2841

memory would have to be increased such that there were at least four memory locations such that at least one memory condition corresponds to a given player.

36. The suggestion or motivation for doing this would be to modify Klein's invention such that it could be applied to time all the players in the new four person version of chess.

37. With respect to claim 17 Klein in view of Kifer (as modified in 103 rejection to claim 16 above) teaches the device of claim 16, further including four displays, in which each display is operable to display one of the times remaining, and in which each display is attached to the body (by means of wires.)

38. With respect to claim 18 Klein in view of Kifer (as modified in 103 rejection to claim 16 above) teaches the device of claim 17, in which a first of the four displays is attached to a first face of the body and a second of the four displays is attached to a second face of the body, in which the first face is different from the second face. (The face of each display would be separate from the other display as it would be on a different console. The body in this sense would be made up not only of the board, but of the consoles as well.)

39. With respect to claim 19 Klein discloses the device of claim 16, further including: a first display operable to display a first and second of the times remaining; and a second display operable to display a third and fourth of the times remaining, in which the first display and the second display are attached to

Art Unit: 2841

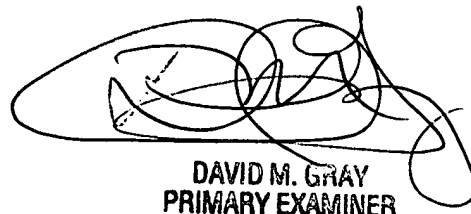
players' times, including the first and second players' times. The second display is the second console which similarly display all the players' times, including the third and fourth players' times. The consoles/displays are connected to the body by means of wires.)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Kayes whose telephone number is (571) 272-8931. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on (571)272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DAVID M. GRAY
PRIMARY EXAMINER

SK
3/16/06